

### ABSTRACT OF THE DISCLOSURE

A method of fabricating a SOI substrate includes sequentially forming a first semiconductor layer, which may be either a porous semiconductor layer or a bubble layer, a second semiconductor layer and a buried oxide layer on a front surface of a semiconductor substrate, forming an etch stopping layer, which may be a silicon nitride layer, on a front surface of a supporting substrate; contacting the etch stopping layer with the buried oxide layer to bond the semiconductor substrate to the supporting substrate; and selectively removing the semiconductor substrate and the first semiconductor layer to expose the second semiconductor layer. The method may additionally include forming a buffer oxide layer between the supporting substrate and the etch stopping layer.